

REMARKS

The Official Action of April 17, 2003 has been carefully considered. Applicant appreciates the Examiner's thorough review of the application. The changes presented herewith, taken with the following remarks, are believed sufficient to place the present application in condition for allowance. Reconsideration is respectfully requested.

By the present amendment, claims 1, 2, 4-7, 9, 11, 12, 16, 20, 22, 23, 25 and 26 have been amended, claim 27 has been rewritten in independent form, and new claims 28-31 have been added and are believed to at least read on elected Species III (i.e., see FIG. 5) of the invention. Accordingly, claims 1-31 stand pending in this application and, as set forth below, are believed to be in condition for allowance.

In the Official Action, the Examiner rejects claims 1, 6-9, 12 and 20-27 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,251,408 to Boaz, U.S. Patent No. 4,484,417 to Klingerman or U.S. Patent No. 5,826,478 to Zerrer. Applicant respectfully traverses this rejection for the reasons stated more fully below.

Neither Boaz, Klingerman nor Zerrer disclose all of the limitations of the claims. For example, claim 1 recites a machining device including a fluid delivery system being operative to disperse fluid to contact the tool primarily at a location inboard from the outer surface and to deliver the fluid into the tool for transmission through the tool to the workpiece interface. Similarly, claim 22 recites a method of machining a workpiece including the step of dispersing fluid from the fluid delivery system such that the fluid is delivered into the tool after contacting the tool primarily at a contact location inboard from the outer surface of the tool and the step of rotating the tool about the rotational axis such that fluid is transmitted

through the tool to the workpiece interface. Boaz, Klingerman and Zerrer at least fail to disclose the underlined portions of the claims set forth above. Indeed, Boaz discloses a grinding wheel assembly with a grinding wheel (12), a flange (14) and a circumferential trough (26). The grinding wheel (12) includes slots (16) to communicate with fluid. The slots (16) provide the grinding wheel with an outer peripheral surface that has a toothed arrangement. Fluid enters the trough (26) and eventually overflows a weir (34), thereafter entering into slots (16) to engage the outer toothed peripheral surface. The fluid never enters into the tool but is merely introduced to the toothed peripheral surface of the grinding wheel after pouring over the weir. In contrast, claim 1 requires a fluid delivery system being operative to disburse fluid into the tool for transmission through the tool to the workpiece interface. Similarly, claim 22 requires the step of dispersing fluid from the fluid delivery system such that the fluid is delivered into the tool and the step of rotating the tool about the rotational axis such that fluid is transmitted through the tool to the workpiece interface. As Boaz completely lacks these limitations, Applicant respectfully requests removal of the rejection of claims 1 and 22 in view of Boaz.

Klingerman discloses a sawing apparatus including an abrasive saw blade (24) with two sets of nozzles that direct a coolant liquid to opposite side surfaces of the blade. See column 1, lines 46-48. The liquid flows down the side surfaces of the blade to the machining zone as shown in FIG. 2. The fluid introduced by the nozzles of Klingerman never enter into the tool but is merely introduced to the side surfaces of the grinding wheel and never transmit through the tool but merely flows along the outer side surfaces of the grinding wheel. In contrast, as stated above, claim 1 requires a fluid delivery system being operative to disburse

fluid into the tool for transmission through the tool to the workpiece interface. Similarly, claim 22 requires the step of dispersing fluid from the fluid delivery system such that the fluid is delivered into the tool and the step of rotating the tool about the rotational axis such that fluid is transmitted through the tool to the workpiece interface. As Klingerman fails to disclose all of the limitations of these claims, Applicant respectfully requests removal of the rejection of claims 1 and 22 in view of Klingerman.

Still further, Zerrer discloses a cutter (1) with a cutting wheel (2). A liquid is introduced in small amounts into a protective cover (4) to engage the side surfaces of the cutting wheel (2). After engaging the cutting wheel, the water thereafter flows along the side surfaces as the cutting wheel rotates. The fluid introduced by the nozzles of Zerrer never enters into the tool but is merely introduced to the side surfaces of the grinding wheel and never transmit through the tool but merely flows along the outer surfaces of the grinding wheel. As previously stated, claim 1 requires a fluid delivery system being operative to disburse fluid into the tool for transmission through the tool to the workpiece interface. Similarly, claim 22 requires the step of dispersing fluid from the fluid delivery system such that the fluid is delivered into the tool and the step of rotating the tool about the rotational axis such that fluid is transmitted through the tool to the workpiece interface. Therefore, Applicant respectfully requests removal of the rejection of claims 1 and 22 in view of Zerrer as failing to disclose all of the limitations of the claims.

Claims 6-9, 12, 20, 21, 28 and 29 depend directly or indirectly from currently amended claim 1. Claims 23-26 and 30 also depend directly or indirectly from currently amended claim 22. As Boaz, Klingerman or Zerrer cannot anticipate claim 1 or 22 as stated

more fully above, it necessarily follows that these references cannot anticipate any of claims 6-9, 12, 20, 21, 23-26, or 28-30 that depend directly or indirectly from claims 1 or 22.

Original claim 27 has been rewritten in independent form and claim 31 has been added. Both claims 27 and 31 contain further limitations that are not disclosed by Boaz, Klingerman or Zerrer. Claims 27 and 31 comprises the further step of modifying parameters to compensate for changes in material characteristics of the tool in order to assist in maintaining proper dispersal of fluid at the machining zone. Neither Boaz, Klingerman, nor Zerrer are believed to teach or suggest these claim limitations. Accordingly, Applicant respectfully requests removal of the rejection of claim 27 or any application of a similar rejection to claim 31 for these additional reasons.

It is believed that the above represents a complete response to the Examiner's claim rejections, and therefore places the present application in condition for allowance. Applicant further requests consideration and allowance of claims 2-5, 10, 11 and 13-19 that were previously withdrawn by the Examiner since these claims depend directly or indirectly from allowable claim 1. Reconsideration and an early allowance of claims 1-31 is therefore respectfully requested.

Respectfully submitted,

By Stephen S. Wentsler
Stephen S. Wentsler
Registration No. 46,403
DINSMORE & SHOHL LLP
1900 Chemed Center
255 East Fifth Street
Cincinnati, Ohio 45202
(513) 977-8683

923147